



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,265	10/20/2003	Brian L. Smith	5681-11500	2888

35690 7590 07/17/2006

MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C.  
700 LAVACA, SUITE 800  
AUSTIN, TX 78701

EXAMINER

RADOSEVICH, STEVEN D

ART UNIT PAPER NUMBER

2138

DATE MAILED: 07/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/689,265	<b>Applicant(s)</b> SMITH, BRIAN L.	
	<b>Examiner</b> Steven D. Radosevich	<b>Art Unit</b> 2138	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Claims 1-20 are present for examination.

#### ***Information Disclosure Statement***

Examiner notes that as of 7/7/06 no Information Disclosure Statement (IDS) is within the case within the Docket of the Examiner. However the IDS document disclosing three US Patent Documents (6201829, 5764655, and 5621741) provided by the applicant within the instant response will be considered and given the effective date of 4/8/04 (Timestamp date on the Acknowledgement Receipt) at this time and added to the 1449 - References cited sheet, attached with this action.

#### ***Drawings***

The drawings (3A-C and 4) previously objected by the examiner are now accepted after consideration and explanation from the applicant within the instant response from the applicant. The examiner does not see any other informalities or errors within the drawings at this time that would result in the drawings being further objected.

#### ***Claim Objections/Claim Rejections - 35 USC § 112***

The previous Claim Objections and 35 USC § 112 Rejections have been overcome with the applicants corrections to the claims as claims appear in the newly submitted claims within the instant response from the applicant.

#### ***Response to Arguments***

Applicant's arguments, see pages 7/9-8/9, filed 5/5/06, with respect to the rejection(s) of claim(s) 1-20 under Firth (US Pub 2002/0138802) have been fully

considered and are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of Kohiyama (US Patent 5621741).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 7, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Kohiyama (US Patent 5621741).

1. As per claims 1, 7, and 13, Kohiyama teaches.

Storing a first value (column 4 lines 20-67);

Storing a second value (column 4 lines 20-67);

Receiving a clock signal (column 4 lines 20-67);

Selecting either said first value or said second value for inclusion in a test pattern in response to said clock signal (column 4 lines 20-67);

Wherein determining whether to select either said first value or said second value on a given clock cycle is determined according to a predetermined test pattern sequence (column 4 lines 20-67).

2. As per claims 2, 8, and 14, Kohiyama teaches wherein said test pattern sequence comprises a plurality of indications (column 4 lines 20-67) indicating either said first value or said second value.

3. As per claims 3 and 9, Kohiyama teaches wherein said first value is stored in a first register location, and said second value is stored in a second register location, and wherein both said first and second register locations correspond to a same link signal line (Examiner believes it to be inherent – column 4 lines 20-67).

4. As per claims 4 and 10, Kohiyama teaches further comprising driving values of said test pattern from a first component to a second component (column 4 lines 20-67).

5. As per claims 5 and 11, Kohiyama teaches wherein each of said first component and said second component alternate driving values of said test pattern during a sixteen test cycle sequence (column 4 lines 20-67).

6. As per claims 6 and 12, Kohiyama teaches wherein said alternate driving of values by said first component and said second component is separated by one or more turnaround cycles (column 4 lines 20-67).

7. As per claim 15, Kohiyama teaches wherein each test cycle said control circuitry iterates through said test patten sequence in order to ascertain a bit pattern indication for each test cycle (column 4 lines 20-67).

8. As per claim 16, Kohiyama teaches wherein said component is configured to drive values of said test pattern via said link (column 4 lines 20-67 figures 1-5).

9. As per claim 17, Kohiyama teaches wherein during a sixteen test cycle sequence, said component is configured to alternate between driving two sequential values of said test pattern and receiving two values of said test pattern (column 4 lines 20-67).

Art Unit: 2138

10. As per claim 18, Kohiyama teaches further comprising a plurality of receivers coupled to said link, and wherein said component includes pattern checking circuitry configured to compare values received via said link to expected values (column 1 lines 30-37, column 4 lines 20-67, and figures 1-5).

11. As per claim 19, Kohiyama teaches wherein said register comprises N bits, said first pattern comprises N/2 bits, said second pattern comprises N/2 bits, and said link comprises N/2 signal lines, and wherein each signal line corresponds to one bit of each of said first pattern and said second pattern (column 4 lines 20-67 and figures 1-5).

12. As per claim 20, Kohiyama teaches wherein each signal line is coupled to receive a value from a multiplexer, wherein each multiplexer is coupled to one bit of said first pattern and one bit of said second pattern, and wherein said control circuitry is configured to control each multiplexer to convey from each multiplexer a bit from either said first pattern or said second pattern (Examiner believes it to be inherent – column 4 lines 20-67).

### ***Conclusion***

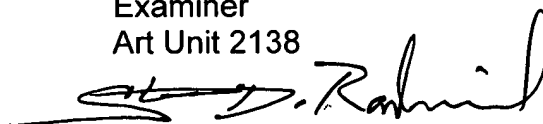
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Radosevich whose telephone number is 571-272-2745. The examiner can normally be reached on 9am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 571-272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2138

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Steven D. Radosevich  
Examiner  
Art Unit 2138



ALBERT DECADY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2108